

## **REMARKS**

This Amendment responds to the Office Action mailed on April 30, 2007. Reconsideration in light of the remarks and amendments contained herein is respectfully requested.

### **I. Oath/Declaration**

The Examiner requested a supplemental oath or declaration for the text added by the preliminary amendment filed with the current application. However, please note that the subject matter that the Examiner refers to is supported by the originally filed claims 5 and 13 in the parent application. Accordingly, the original declaration signed by the inventors covers this subject matter. Therefore, Applicants respectfully request that the requirement for a new oath/declaration be withdrawn.

### **II. Amendments to the Drawings**

In compliance with the rejection to the drawings, the attached replacement drawings include the reference numbers 144, 146, 148, 150, 152, 156, 158, 160, 162, 164, and 170. The above amendment to the specification (at page 7, paragraph beginning on line 7) corrects the reference number 130 to be 120.

### **III. Amendments to the Specification**

In addition to the amendment to the specification to correct the reference number, the paragraph on page 8, beginning on line 9 and the paragraph on page 7, beginning on line 22 have

been amended to make the specification more clear. The amendments are supported by the surrounding text and Fig. 1. No new matter has been entered.

#### **IV. Rejections Under 35 U.S.C. § 102 and § 103**

Independent claims 17, 31, and 33 are amended to add limitations such as a disengagement zone comprising a hydrocarbon monomer having a water content and undissolved water entrained with the hydrocarbon, and a polymerization reactor. New dependent claims 34-42 also recite these limitations in different combinations with the independent claims as well as new limitations such as a three-way valve, and a liquid contained in the second vessel. Support for each of these limitations can be found in the specification as follows:

|                            |   |
|----------------------------|---|
| Claims 17, 31, 36, and 38: | Page 5, paragraph beginning on line 14            |
| Claims 34, and 39:         | Page 2, paragraph beginning on line 29 and Fig. 1 |
| Claims 33, 35, and 37      | Page 6, paragraph beginning on line 24 and Fig. 1 |
| Claim 40                   | Page 2, paragraph beginning on line 23            |
| Claims 41 and 42           | Page 7, paragraph beginning on line 7, and Fig. 1 |

Applicants assert that the newly added limitations to a disengagement zone and a polymerization reactor specify structural parts of the apparatus. These limitations are not directed to an intended use or merely an article worked upon under MPEP § 2115.

In contrast to the new limitations, the cited prior art deals with the treatment of gases including natural gas (Okada, JP 05171164), gases containing VOCs (Holst, U.S. 5,650,128), toxic waste gas (Yoneda, U.S. 5,123,836), unspecified gases (Niwa, 4,705,654), and ethylene gas (Smith, Jr. U.S. 5,446,223). None of the references deals with polymerization, contains a disengagement zone with hydrocarbon monomer having a water content and undissolved water

entrained with the hydrocarbon or discloses a polymerization reactor. Moreover, the cited references do not disclose or suggest the claims as amended.

New dependent claims 34-42 also recite limitations that are novel and unobvious over the cited art.

## **V. Conclusion**

For the foregoing reasons, the undersigned submits that the application is now in condition for allowance, and allowance is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Nathan T. Lewis', is written over a horizontal line.

Nathan T. Lewis (Reg. No. 56,218)  
Jones Day  
North Point, 901 Lakeside Avenue  
Cleveland, Ohio 44114  
(216) 586-3939